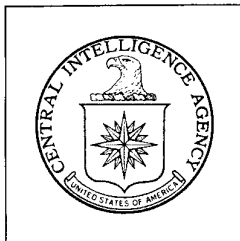


25X1

Approved For Release 2003/08/05 : CIA-RDP02T06408R000400010009-7

Top Secret



DIRECTORATE OF
INTELLIGENCE

Imagery Analysis Report

Severodvinsk Naval Base & Shipyard 402, Severodvinsk, USSR
Precision Plot, Functional Analysis, & Berthing Space Delineation

Declass Review by
NIMA/DOD

Top Secret

25X1

DDI/IAR 83018
DATE AUGUST 1967
COPY 45
PAGES 12

Approved For Release 2003/08/05 : CIA-RDP02T06408R000400010009-7

25X1

Approved For Release 2003/08/05 : CIA-RDP02T06408R000400010009-7

Approved For Release 2003/08/05 : CIA-RDP02T06408R000400010009-7

SEC.	CLASS.	LOCATION
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9
10	10	10
11	11	11
12	12	12
13	13	13
14	14	14
15	15	15
16	16	16
17	17	17
18	18	18
19	19	19
20	20	20
21	21	21
22	22	22
23	23	23
24	24	24
25	25	25
26	26	26
27	27	27
28	28	28
29	29	29
30	30	30
31	31	31
32	32	32
33	33	33
34	34	34
35	35	35
36	36	36
37	37	37
38	38	38
39	39	39
40	40	40
41	41	41
42	42	42
43	43	43
44	44	44
45	45	45
46	46	46
47	47	47
48	48	48
49	49	49
50	50	50
51	51	51
52	52	52
53	53	53
54	54	54
55	55	55
56	56	56
57	57	57
58	58	58
59	59	59
60	60	60
61	61	61
62	62	62
63	63	63
64	64	64
65	65	65
66	66	66
67	67	67
68	68	68
69	69	69
70	70	70
71	71	71
72	72	72
73	73	73
74	74	74
75	75	75
76	76	76
77	77	77
78	78	78
79	79	79
80	80	80
81	81	81
82	82	82
83	83	83
84	84	84
85	85	85
86	86	86
87	87	87
88	88	88
89	89	89
90	90	90
91	91	91
92	92	92
93	93	93
94	94	94
95	95	95
96	96	96
97	97	97
98	98	98
99	99	99
100	100	100

TS

34740

25X1

25X1

Approved For Release 2003/08/05 : CIA-RDP02T06408R000400010009-7

Approved For Release 2003/08/05 : CIA-RDP02T06408R000400010009-7

25X1

Approved For Release 2003/08/05 : CIA-RDP02T06408R000400010009-7

IMAGERY ANALYSIS SERVICE

29 November 1967

DDI

IMAGERY ANALYSIS SERVICE

ERRATUM FOR DDI/IAR-83018

The following changes should be made to the above referenced report, DDI/IAR-83018, Severodvinsk Naval Base and Shipyard 402, Severodvinsk, USSR, Precision Plot Functional Analysis, and Berthing Space Delineation,

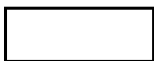
- a. Reference page (page 12), delete effectively the entire Documents reference section.
- b. Change overall classification of report to read TOP SECRET

GROUP 1
Excluded from automatic
downgrading and declassification

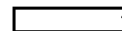
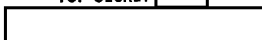
TOP SECRET

Approved For Release 2003/08/05 : CIA-RDP02T06408R000400010009-7

25X1



TOP SECRET 



25X1
25X1
25X1

Approved For Release 2003/08/05 : CIA-RDP02T06408R000400010009-7

SEVERODVINSK NAVAL BASE AND SHIPYARD 402
SEVERODVINSK, USSR

PRECISION PLOT, FUNCTIONAL ANALYSIS, AND BERTHING SPACE DELINEATION

- 1 -

Approved For Release 2003/08/05 : CIA-RDP02T06408R000400010009-7



25X1
25X1
25X1

25X1



TOP SECRET



25X1
25X1

Approved For Release 2003/08/05 : CIA-RDP02T06408R000400010009-7

CONTENTS

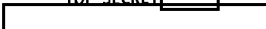
	<u>Page</u>
Introduction	3
Key to Annotations of Major Facilities	3
References	12

Illustrations

Figure 1. Location Map and Photograph of the Severodvinsk Naval Base and Shipyard 402 Complex	4
Figure 2. Precision Plot of the Severodvinsk Naval Base and Shipyard 402 Complex	5
Figure 3. Precision Plot of the Main Shipyard (Fabrication/Assembly Area) and East Quay Area	6
Figure 4. Precision Plot of the Main Shipyard (Fitting-out Quay) and West Basin Area	7
Figure 5. Precision Plot of the Yagry Island Nuclear Submarine Special Support Facility	8
Figure 6. Precision Plot of the Yagry Island Naval Repair Facility	9
Figure 7. Annotated Photograph of the Severodvinsk Naval Missile Storage and Handling Facility	10
Figure 8. Precision Plot of the Severodvinsk Naval Missile Storage and Handling Facility	11

Approved For Release 2003/08/05 : CIA-RDP02T06408R000400010009-7

TOP SECRET



25X1
25X1
25X1

25X1

TOP SECRET

25X1

25X1

Approved For Release 2003/08/05 : CIA-RDP02T06408R000400010009-7

INTRODUCTION

The Severodvinsk Naval Base and Shipyard 402 complex at Severodvinsk, USSR (64-35N 039-50E) is located approximately 17 nm east of Arkhangelsk at the southeastern extremity of Dvinskaya Bay. The complex consists of five main areas. They are: (1) the Nuclear Submarine Special Support Facility; (2) Yagry Island Naval Repair Facility; (3) the Main Shipyard; (4) West Basin Area; and (5) the Naval Missile Storage and Handling Facility (see Figures 3 through 8).

The purpose of this report is to provide a detailed mensural and functional analysis of these facilities and to assign berthing space numbers to the nearly four miles of linear berthage within the shipyard complex. The berthing spaces have been annotated on the base plots in order to simplify subsequent reporting of vessels. An arbitrary berthing space length of roughly 450 feet was selected.

The precision plots included in this report represent mathematically rectified projections of the area. They were compiled by utilizing precise comparators coupled to electronic recording devices. Identifiable image points were measured on the photography and recorded as coordinate values. Over 13,800 independent

pointings were made. The coordinate values were then processed by high speed computers which utilize a rigorous math model to perform translations, rotations and scale changes. Orbital parameters supplied the necessary data needed for these transformations. Dimensional information and a digitized tape were produced by the computer. The digitized tape was used in conjunction with an analog plotter to produce the rectified plots.

Although these plots represent the most accurate data compiled to date, this data should not be interpreted to represent an orthogonal projection. Orthogonal projections are based and projected on controlled horizontal datums, where distances, angles, and areas are independent of distortions due to ground and image height relief. The transformations performed in this area have corrected for camera induced distortions (pitch, roll, yaw) only.

All measurements have been made by the NPIC Technical Intelligence Division and are considered to be accurate within ± 5 percent, whichever is greater. Horizontal accuracy due to relief displacement is considered to be accurate within ± 5 percent.

25X1

KEY TO ANNOTATIONS OF MAJOR FACILITIES *

FIGURE 3

Item	Subject
1	Thermoelectric heat and power plant
4-5	Control houses
6	Coal dressing building
12	Fabrication building
13	Storage building
14	Shop building
15	Storage building
18-22	Administration buildings
23	Storage building
24	Fabrication building
25	Shop building
26-29	Fabrication/machine shops
30-31	Fabrication buildings
33	Storage building
34	Probable foundry
35-37	Shop buildings
38	Unidentified building
39	Storage building
40	Fabrication building
41	Shop building (secured)
42	Unidentified building
45	Shop building
47	Submarine hull section sub-assembly building
51-54	Storage buildings
55-60	Unidentified facility
62	Main construction hall
64	Heat treatment building
65-68, & 74	Fabrication/machine shops
75-84	Administration buildings

FIGURE 4

Item	Subject
86	Fabrication/machine shop
87-88	Unidentified buildings
90-126	Storage buildings
127-137	Fitting-out shops
138	Fabrication and construction hall
139	Storage building
140	Shop building
141	Winch house
142, 144-147	Storage buildings

FIGURE 5

Item	Subject
149	Radioactive waste storage/handling building
150-151	Probable processing buildings
152	Unidentified building
153	Probable processing building
154	Probable office/support building
155	Steam plant
156-160	Probable storage buildings
161	Probable administration building
162	Operations and shop building
163	Unidentified building
164	Possible steam pressure reducing and cooling building
165-167	Unidentified buildings
168	Probable security building
169-178	Storage buildings

FIGURE 6

179-181	Unidentified facility
182	Covered repairways under construction
183-185	Fabrication/machine shops
186-187	Fabrication buildings
189-190	Shop buildings
191	Unidentified building under construction
192-195	Storage buildings
196	Steam plant
197	Shop building
198	Administration building
201	Fitting-out building
202	Storage building
203	Fitting-out building

* Buildings not contained in this key are unidentified or considered to be of lesser importance than those listed.

Approved For Release 2003/08/05 : CIA-RDP02T06408R000400010009-7

TOP SECRET

25X1

25X1

25X1

25X1

TOP SECRET

25X1
25X1

Approved For Release 2003/08/05 : CIA-RDP02T06408R000400010009-7



FIGURE 1. SEVERODVINSK NAVAL BASE AND SHIPYARD 402.

25X1
25X1

Approved For Release 2003/08/05 : CIA-RDP02T06408R000400010009-7

TOP SECRET

25X1
25X1

25X1

TOP SECRET

Approved For Release 2003/08/05 : CIA-RDP02T06408R000400010009-7

IMAGERY ANALYSIS SERVICE

25X1

25X1

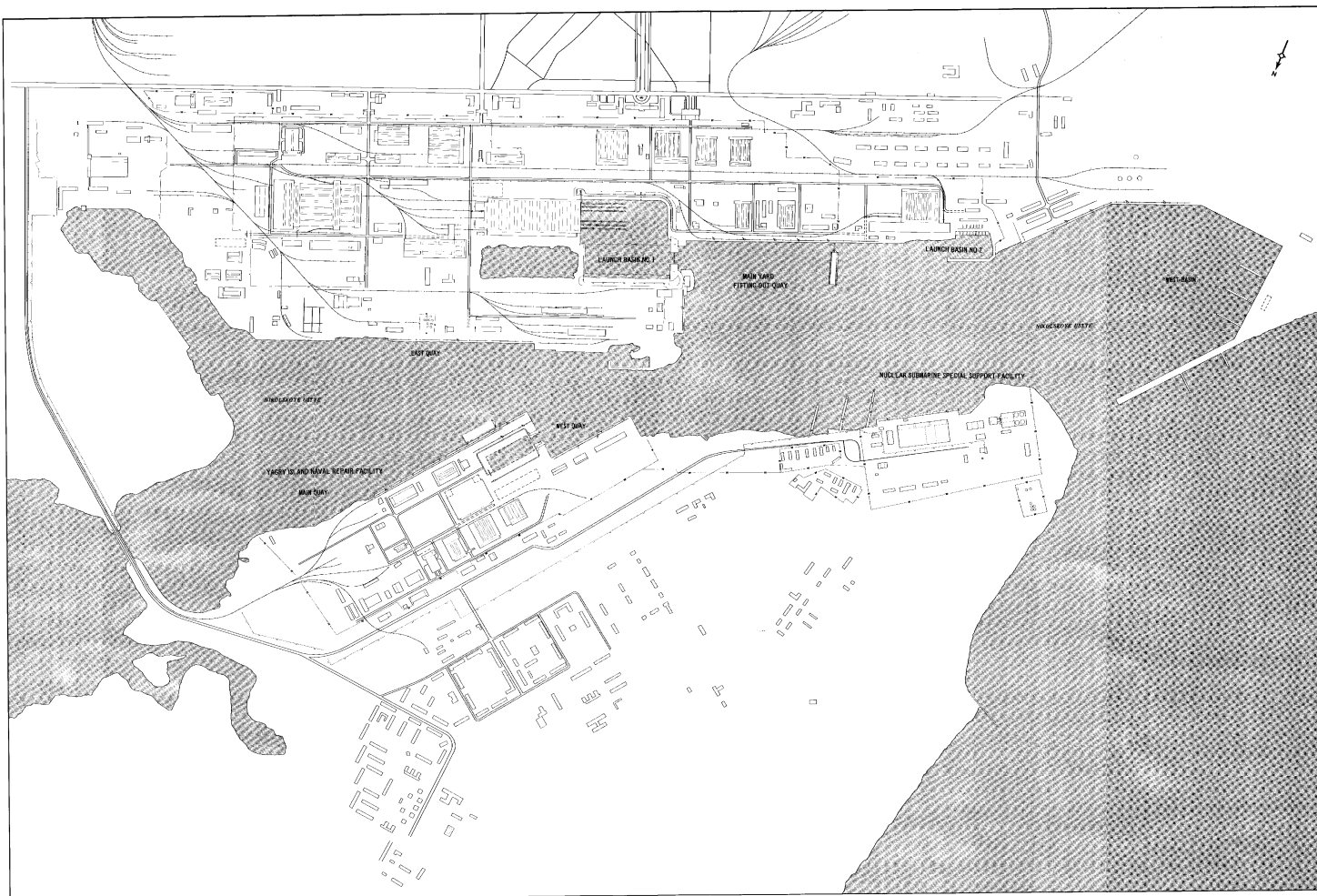


FIGURE 2. SEVERODVINSK NAVAL BASE AND SHIPYARD 402.

TOP SECRET

Approved For Release 2003/08/05 : CIA-RDP02T06408R000400010009-7

25X1

25X1

25X1

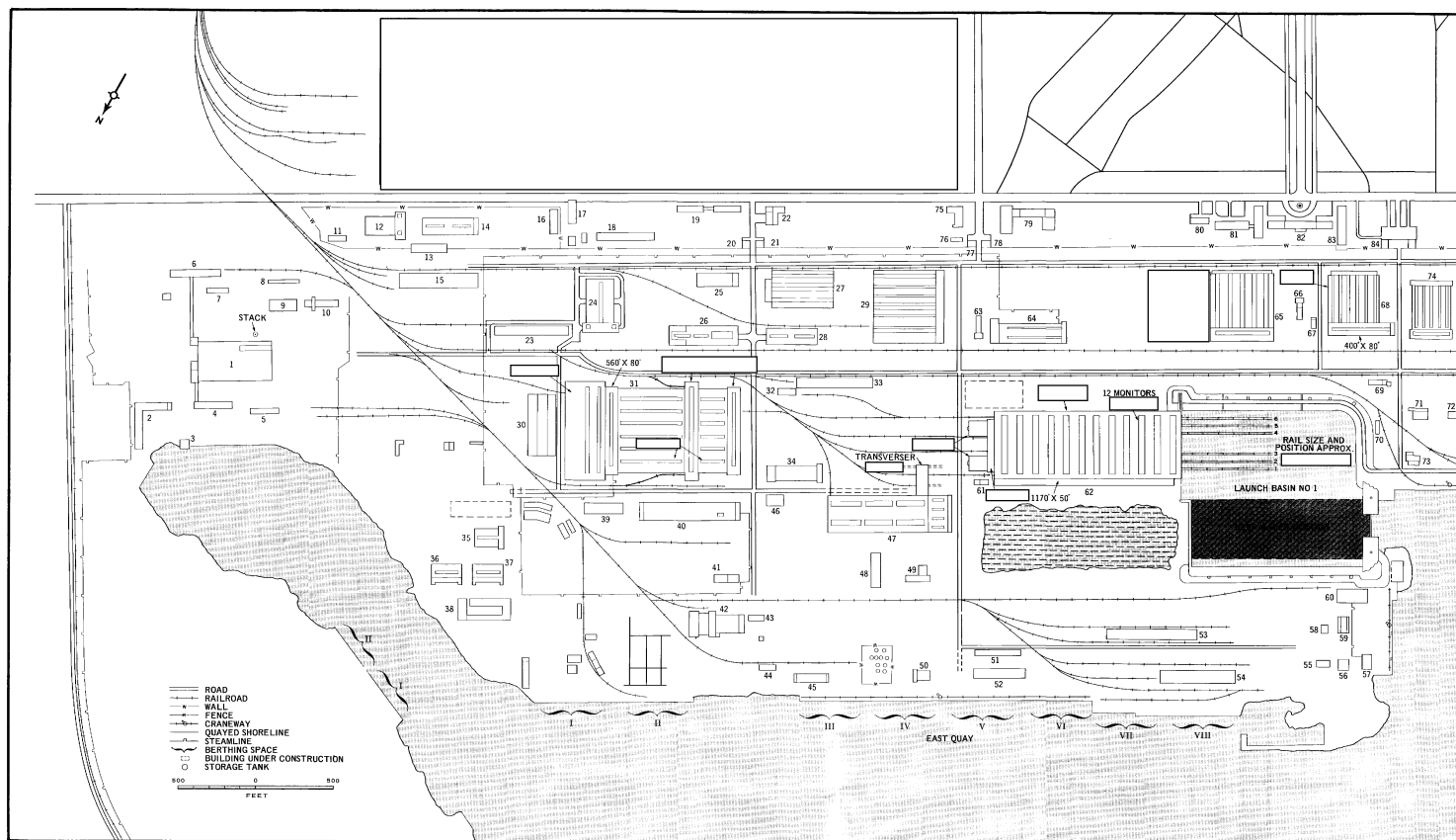


FIGURE 3. MAIN SHIPYARD (FABRICATION/ASSEMBLY AREA) AND EAST QUAY.

25X1

TOP SECRET

25X1
25X1
25X1

Approved For Release 2003/08/05 : CIA-RDP02T06408R000400010009-7

25X1
25X1
25X1

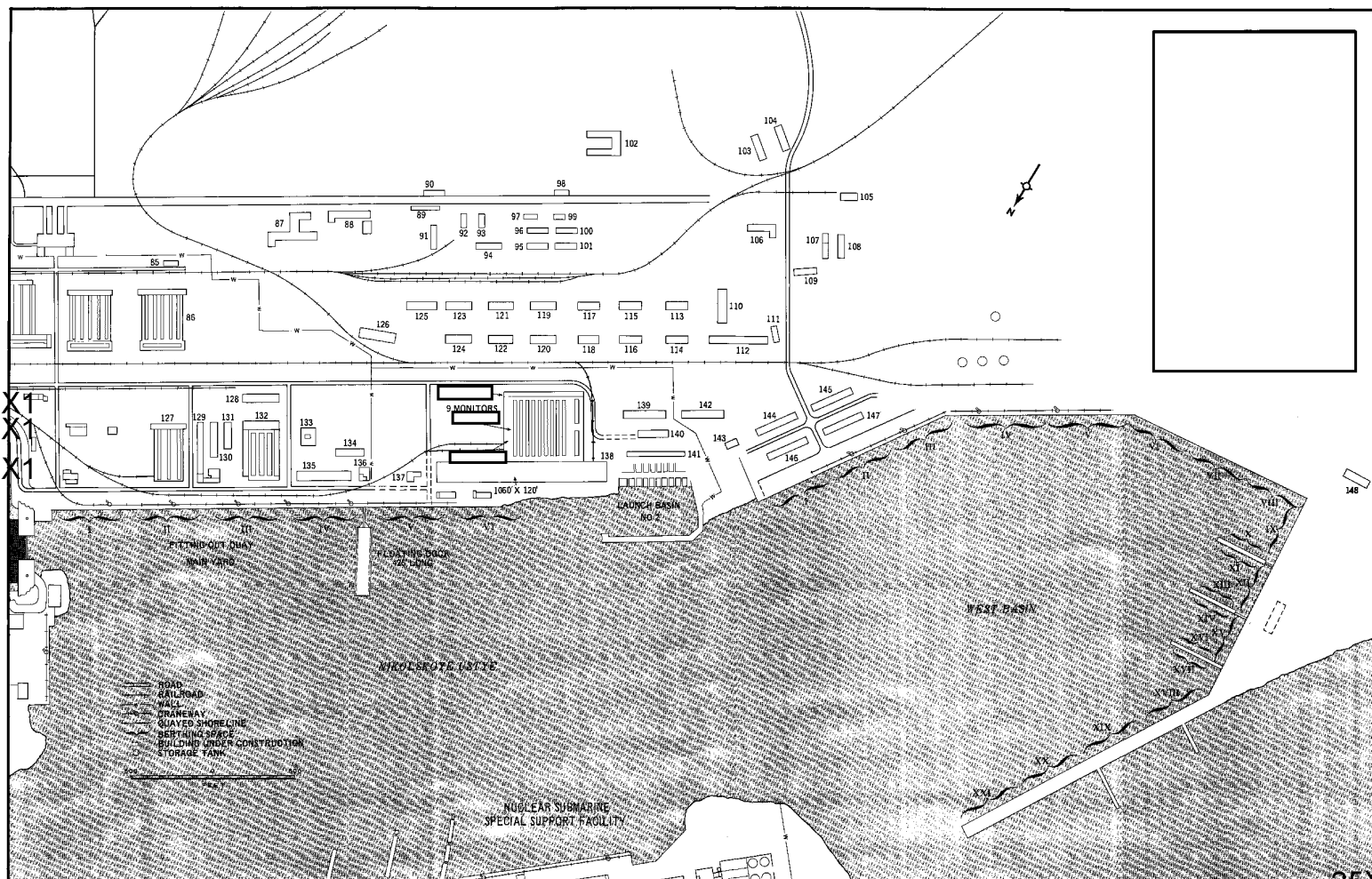


FIGURE 4. MAIN SHIPYARD (FITTING-OUT QUAY) AND WEST BASIN AREA.

Approved For Release 2003/08/05 : CIA-RDP02T06408R000400010009-7

TOP SECRET

25X1
25X1
25X1

25X1

TOP SECRET

Approved For Release 2003/08/05 : CIA-RDP02T06408R000400010009-7

25X1
X1
25X1



FIGURE 5. YAGRY ISLAND NUCLEAR SUBMARINE SPECIAL SUPPORT FACILITY.

Approved For Release 2003/08/05 : CIA-RDP02T06408R000400010009-7

TOP SECRET

25X1

25X1
25X1

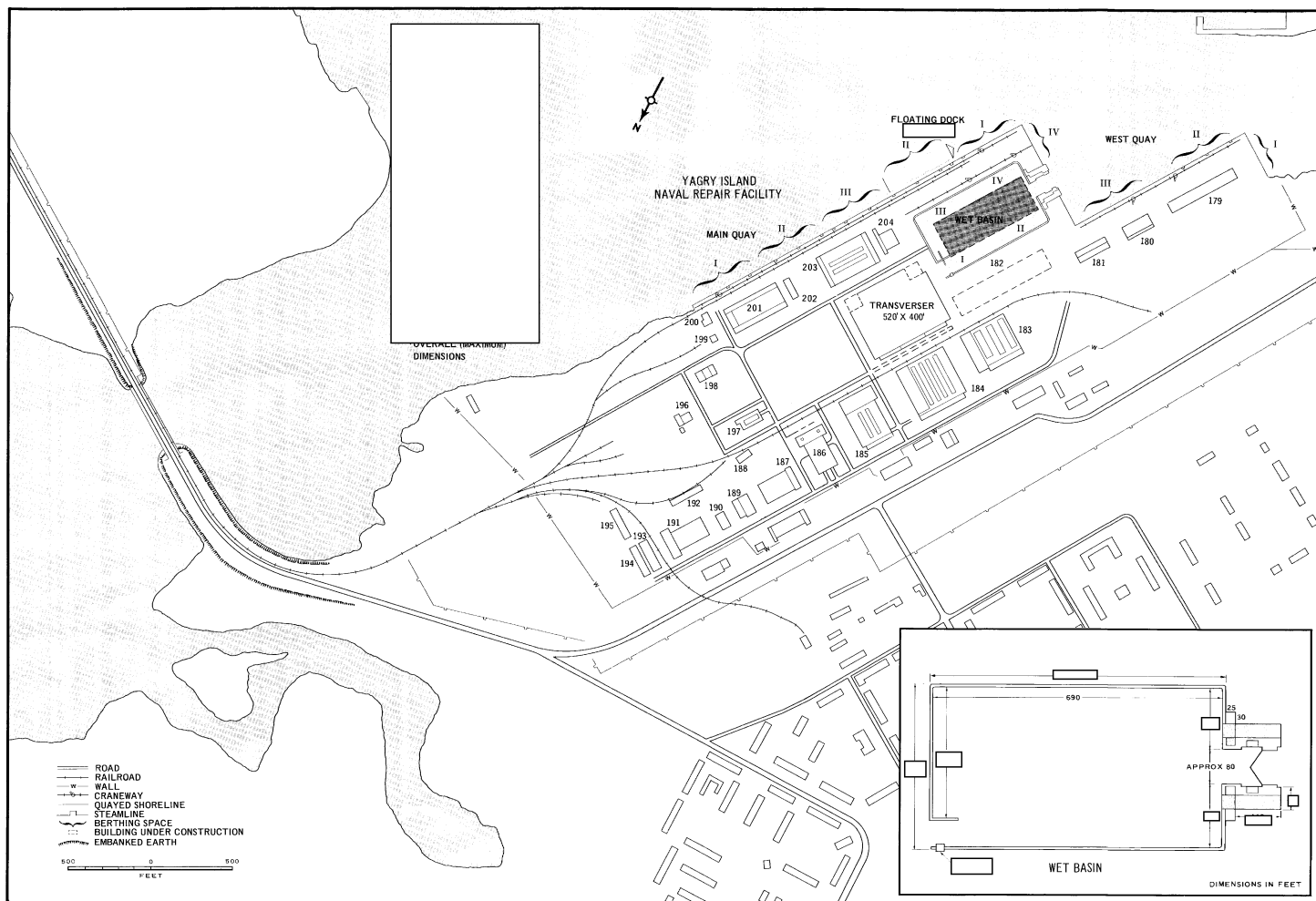


FIGURE 6. YAGRY ISLAND NAVAL REPAIR FACILITY.

25X1

TOP SECRET

Approved For Release 2003/08/05 : CIA-RDP02T06408R000400010009-7

25X1
13X1
25X1

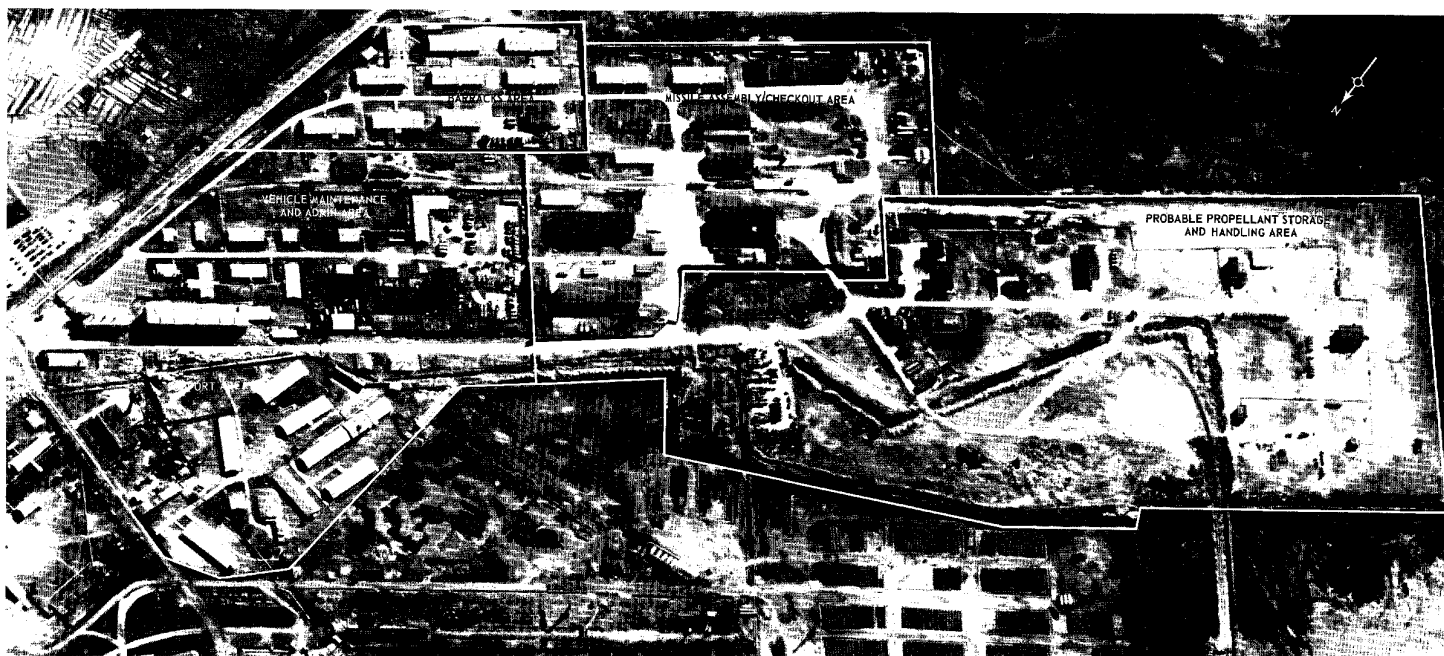


FIGURE 7. SEVERODVINSK NAVAL MISSILE STORAGE AND HANDLING FACILITY.

25X1

25X1

- 10 -

Approved For Release 2003/08/05 : CIA-RDP02T06408R000400010009-7

TOP SECRET

5X1

25X1

25X1

TOP SECRET
Approved For Release 2003/08/05 : CIA-RDP02T06408R000400010009-7
IMAGERY ANALYSIS SERVICE

25X1

25X1

25X1

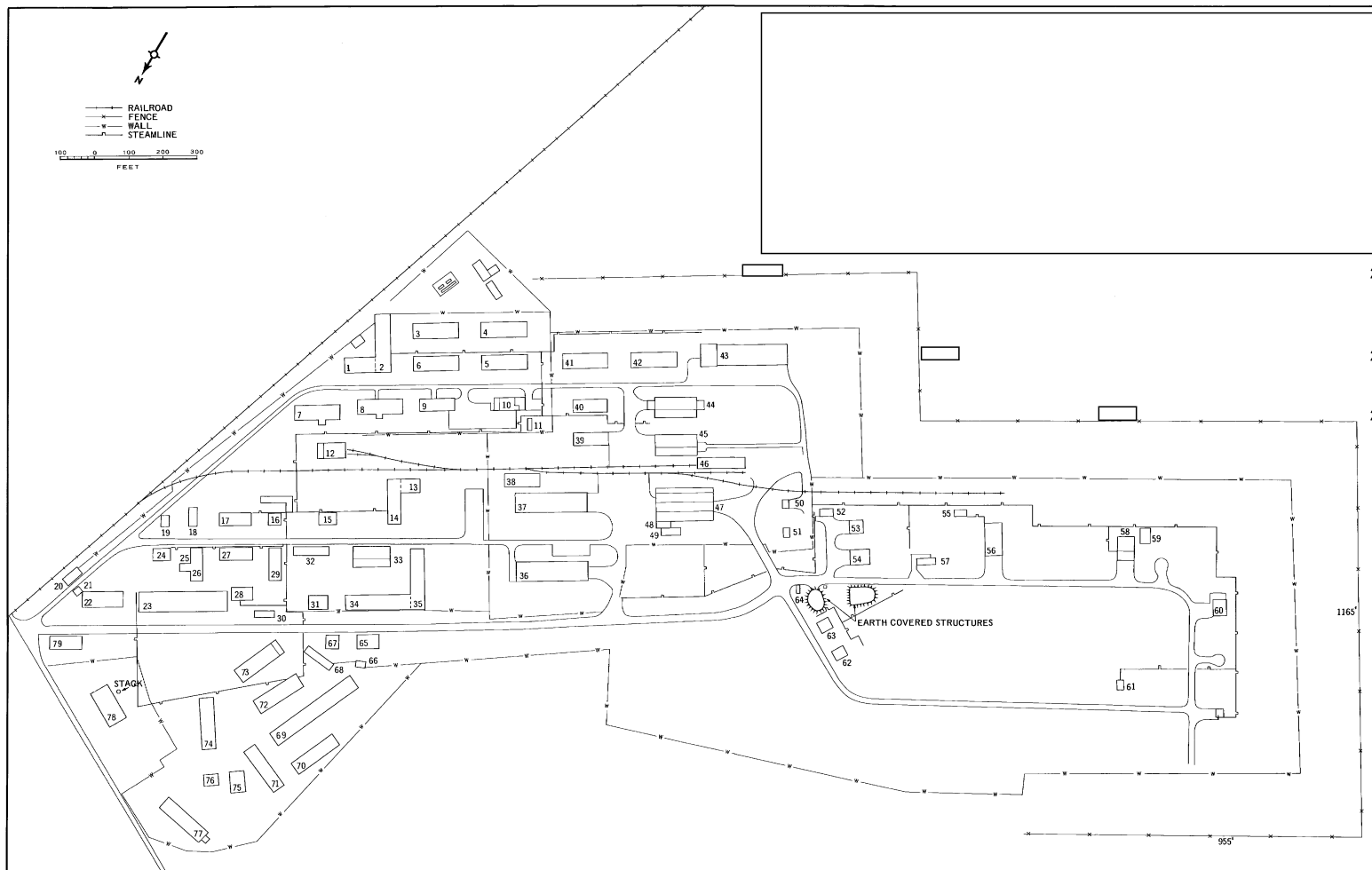


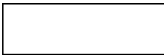
FIGURE 8. SEVERODVINSK NAVAL MISSILE STORAGE AND HANDLING FACILITY.

TOP SECRET
Approved For Release 2003/08/05 : CIA-RDP02T06408R000400010009-7

25X1

25X1

25X1



TOP SECRET [redacted]
Approved For Release 2003/08/05 : CIA-RDP02T06408R000400010009-7
IMAGERY ANALYSIS SERVICE



25X1
25X1
25X1

REFERENCES



25X1

Documents

CIA. CIA/PIR-75118, Nuclear Submarine Special Support Facilities -
Severodvinsk and Petrovka, USSR, June 1967 (TOP SECRET [redacted])

25X1

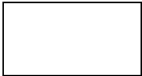
Requirement

C-SI6-83,730

IAS Project

31389-6

25X1



25X1
25X1
25X1

Top Secret



Approved For Release 2003/08/05 : CIA-RDP02T06408R000400010009-7

Top Secret

Approved For Release 2003/08/05 : CIA-RDP02T06408R000400010009-7